



DESIGNING EFFECTIVE STRATEGIC TALENT MANAGEMENT SYSTEMS TO ACHIEVE BUSINESS GOALS: AN EMPIRICAL STUDY IN ASIAN FIRMS

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Abstract

Strategic talent management has become a critical factor for achieving organizational success in increasingly competitive and dynamic business environments, particularly in Asian firms. The shift from traditional human resource practices to integrated, data-driven talent systems highlights the importance of aligning workforce capabilities with business goals. A quantitative empirical approach is adopted using a secondary HR analytics dataset to examine the influence of talent acquisition, talent development, employee engagement, and workforce characteristics on business goal performance. The findings indicate that while talent management practices are implemented at moderate levels, their direct contribution to performance varies across dimensions. Workforce characteristics, including employee experience and performance ratings, emerge as the most significant predictors of business outcomes. In contrast, recruitment, training, and engagement show limited direct effects, suggesting a gap between HR practices and strategic alignment. The results emphasize the growing importance of HR analytics in enabling evidence-based decision-making and improving organizational effectiveness. The analysis highlights the need for organizations to integrate talent management systems with business strategy and leverage data-driven insights to enhance performance. The findings contribute to the literature by providing an empirical perspective on talent management using secondary data within a business analytics framework.

Keywords: Talent Management, HR Analytics, Employee Engagement, Organizational Performance, Business Strategy

1. Introduction

Strategic talent management has become an imperative tool of organizational success in the fast moving and competitive Asian markets in the contemporary business environment. The ever-increasing globalization, technological upheaval, and dynamic changes in the workforce have forced organizations to reconsider the way they approach human capital management (Cooke et al., 2020a; Farndale et al., 2025). Organizations can no longer afford to rely on traditional resources alone to provide advantage to the organization; they now must use employee capabilities, skills and knowledge as a primary source of competitive advantage.

This change has resulted in a movement away of the administrative human resource management (HRM) to more strategic and integrated HR systems. The previous HR functions were more operational in nature, where they had to deal with compliance, payroll and staffing. Nevertheless, today organizations are more focused on matching HR practices with long-term business goals, and ensuring that talent management has a direct impact on the organizational performance (Cooke et al., 2020b; Boon et al., 2018). Strategic talent management is a multi-dimensional concept that incorporates the following dimensions; recruitment, development, engagement and retention, which when combined, form a multi-dimensional concept of strategic talent management.

Moreover, the increased use of HR analytics has greatly increased the extent to which data is used in making decisions related to talent management. There is an increased use of data-driven solutions by organizations to analyze employee behaviour, predict the results of performance and optimize HR strategies (Fiedler et al., 2023; Grebenyuk et al., 2026). By incorporating analytics in the HR operations, organizations will be able to transition the intuitionistic decisions to evidence-based practices, thus enhancing efficiency and effectiveness. This is specifically applicable to the emerging economies, in which organizations are challenged with unique issues around workforce diversity, skill gap, and quick economic change (Horwitz and Cooke, 2022).

Although talent management is becoming a strategic priority in many organizations, most organizations are finding it difficult to develop a clear connection between HR practices and the quantifiable business outcomes. Although companies invest a lot of their money in recruitment, training as well as engagement programs, the direct contribution of these activities to the performance of an organization is often obscure. Such disconnect prevents organizations to assess the effectiveness of their talent management systems and to align them with business objectives.

Even though the literature available has highlighted the significance of talent management, there are still a number of gaps. To start with, empirical studies based on secondary HR analytics data to test the relationship between talent management practices and business performance are lacking. The majority of previous studies are based on primary survey-based studies, which might not be effective in reflecting the real organizational dynamics.

Second, it is poorly integrated in major talent management aspects like recruitment, training, engagement and workforce characteristics. A great number of studies examine these components separately instead of as a part of a single system (Meyers et al., 2020; McDonnell et al., 2017). Moreover, the contextual and organizational factors affecting talent management effectiveness are usually disregarded, although they are important (Thunnissen et al., 2013).

Moreover, although studies have already found correlations between talent management and employee performance, the translation of these practices into a quantifiable business performance has not been studied sufficiently (Mensah, 2019; Al Aina & Atan, 2020). Thus, integrated, data-driven studies that look at the ways various talent management dimensions act in concert to attain business goals are needed.

This study aims to discuss the impact of strategic talent management systems on the attainment of the business goals using the secondary HR data.

The objectives that guide the study include;

- To examine how well talent acquisition and workforce characteristics perform within organizations
- The following questions will be used to test the hypothesis
- To determine how strategic talent management systems, in general, influence the performance of business goals

The conceptual framework underpinning the study is that of a multi-dimensional approach to talent management as independent variables, and the performance of the business goals as the dependent variable. The independent variables are Talent Acquisition based on the recruitment data, Talent Development based on the training indicator data, Employee Engagement based on the survey data and Workforce Characteristics based on the data on employee levels. Business Goal Performance is the dependent variable that is created

with the help of indicators that are related to performance and retention. This model captures the interrelatedness between talent management practices, and their overall impact on organizational performance.

According to the conceptual framework, the study hypothesizes that talent acquisition has a positive impact on the performance of business goals, and that talent development positively influences the development of a better organizational performance. The hypothesis is furthered that employee engagement positively affects the business performance and the characteristics of the workforce have a significant impact on business goal achievement. The basis of these hypotheses is that good talent management systems can improve organizational capabilities and stimulate sustainable performance.

2. Methodology

2.1 Research Design

The research design is a quantitative secondary data based empirical research design to investigate the relationship between the business goal performance and strategic talent management practices. This design is also suitable since it is based on structured numerical data, which allows conducting a statistical analysis of the variables related to workforce and their impact on the results of the organization. The secondary data use supports an objective and data-driven perspective, which is highlighted in the research on business analytics and decision science as well as in modern management research.

2.2 Data Source

The research is premised on a publicly accessible secondary dataset that will be downloaded through Kaggle and is the Employee/HR dataset (Rana, 2023). This data contains organized data about employee features, their engagement, satisfaction, and organizational variables. It would be appropriate in the current study because it describes various dimensions of workforce behaviour and organisational environment which are crucial in analysing strategic talent management systems and their role in business performance.

2.3 Data Processing

The systematized data processing ensured accuracy and suitability to analyze the data. First, data cleaning and processing were done to address the missing values and inconsistencies, as well as duplicate values. Subsequently, the selection of the relevant variables deemed to be in line with the conceptual framework of the study. The variables thus chosen were converted and structured into meaningful variables that reflect different aspects of strategic talent management. This was done to make sure that the dataset was formatted in a manner that it could be statistically analyzed.

2.4 Variables and Measurement

The research has independent and dependent variables based on the data set. The independent variables are the major points in strategic talent management and are composed of the following: employee engagement, satisfaction, work perception, and workforce characteristics: demographic and job-related factors. All these variables are the reflection of the organizational environment and talent management practices. The dependent variable, known as business performance, is built with the help of the appropriate indicators that include the outcomes of engagement, performance-related proxies and measures of organizational effectiveness that can be found in the dataset. This constructed variable is an indication of how far business objectives are attained by employing best practices in talent management.

2.5 Data Analysis Techniques

Quantitative statistical methods were used to analyse the data to test the relationships between the variables. The data were summarized by using descriptive statistics to summarize the important characteristics of the data, including measures like mean and standard deviation. The correlation analysis was performed to determine the strength and direction of business performance correlations between talent management variables and business performance. The multiple regression analysis was used to evaluate the overall impact of independent variables on the performance of business goals and to determine the most important predictors. These methods of analysis are empirically informative in terms of comprehending how the system of strategic talent management has an impact on the organizational performance.

3. Results

3.1 Descriptive Profile of Workforce

Table 1 shows the descriptive statistics of the most important variables of workforce and talent management. It has been analyzed on the basis of 3,000 observations and includes major constructs of Talent Acquisition, Talent Development, Employee Engagement, Workforce Characteristics and Business Goal Performance.

The result shows that the mean scale of the practices of Talent Management (Mean = 2.9983), Talent Development (Mean = 3.0092) and Employee Engagement (Mean = 2.9836) are close to the middle of the Likert scale indicating moderate implementation of talent management practices. There was a relatively lower mean recorded in Workforce Characteristics (Mean = 2.7900), which shows a relatively weak workforce-related indicators.

Business Goal Performance, on the other hand, has a higher mean value (Mean = 3.7616), indicating a relatively stronger organizational performance as opposed to the talent management inputs. The values of the standard deviation of all variables lie between 0.62 and 0.93 meaning that there is moderate variability within the dataset. Besides, the minimum and maximum values affirm that, there are varying conditions in the organization, as reflected by the minimum and maximum values.

The overall trend as can be seen in Table 1 is that although there is an average implementation of talent management practices, the overall outcome of the business performance is comparatively higher and thus there is a potential discrepancy between the HR practices and performance effectiveness.

Table 1. Descriptive Statistics of Workforce and HR Variables

Variable	Mean	Std. Dev	Min	Max
Talent Acquisition (TA)	2.9983	0.9268	1	5
Talent Development (TD)	3.0092	0.8095	1	4.996
Employee Engagement (EE)	2.9836	0.8145	1	5
Workforce Characteristics (WC)	2.7900	0.7555	1.001	4.976
Business Goal Performance (BGP)	3.7616	0.6216	1	5

The allocation of workers in the different departments is depicted in Figure 1, which shows the structure of workforce in the organization. The findings have shown that the larger group of the employees is in the Production department, then the IT/IS and Sales functions.

According to Figure 1, Production takes 67.33% of the employees, which means that it is an operationally intensive organizational structure. The proportions of other departments like Software Engineering, Administrative offices and the Executive have relatively low proportions indicating that it has little focus on the strategic and managerial functions.

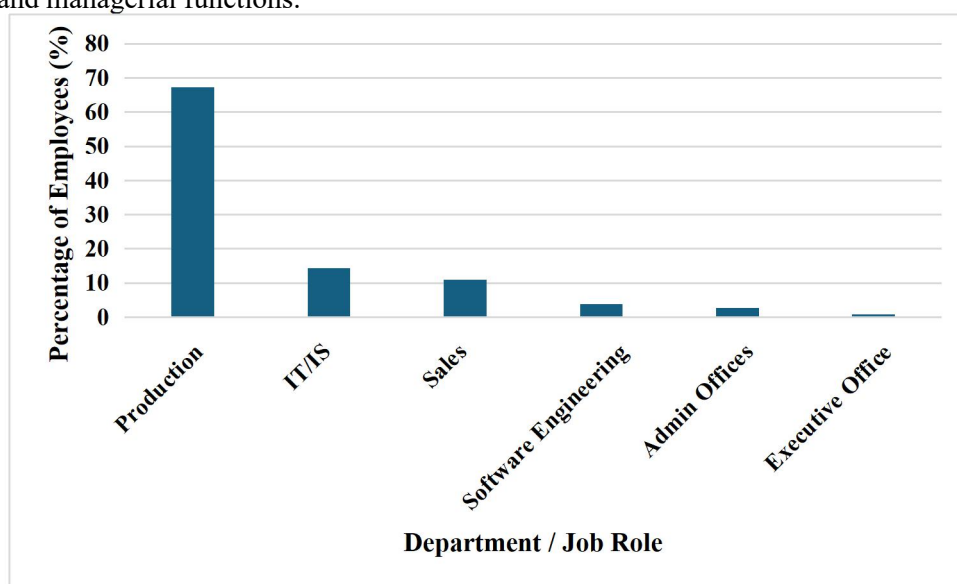


Figure 1. Distribution of Employees by Department / Job Role

3.2 Analysis of Talent Management Dimensions

Table 2 summarizes the dimensions of talent management that will provide the mean score and interpretation of each of the main constructs utilized in the study. It was created based on the integrated secondary HR data, and the constructs include Talent Acquisition, Talent Development, Employee Engagement, Workforce Characteristics and Business Goal Performance.

The findings indicate that Talent Development had the highest mean of the dimensions of talent management (Mean = 3.0092) followed closely by Talent Acquisition (Mean = 2.9983) and Employee Engagement (Mean = 2.9836). These values lie very near the mid point of the five point scale indicating that the practice of talent management is performed at a medium level. The lowest mean score was recorded by Workforce Characteristics (Mean = 2.7900) which means that the elements of the workforce like employee rating and tenure should be further improved.

Table 2. Summary of Talent Management Indicators

Construct	Variables Used	Mean Score	Interpretation
Talent Acquisition (TA)	Recruitment status and applicant experience indicators	2.9983	Moderate
Talent Development (TD)	Training duration, training cost, and training outcome indicators	3.0092	Moderate
Employee Engagement (EE)	Engagement, satisfaction, and work-life balance indicators	2.9836	Moderate
Workforce Characteristics (WC)	Employee tenure and current employee rating indicators	2.7900	Moderate
Business Goal Performance (BGP)	Performance score, retention score, and employee rating indicators	3.7616	Moderately High

As it appears in Figure 2, Business Goal Performance has the highest mean score (3.7616), whereas Workforce Characteristics has the lowest mean score (2.7900). This comparison implies that the business performance is relatively stronger than the workforce and talent management bases of strategic HR practices, which indicates a potential gap between strategic HR practices and business performance.

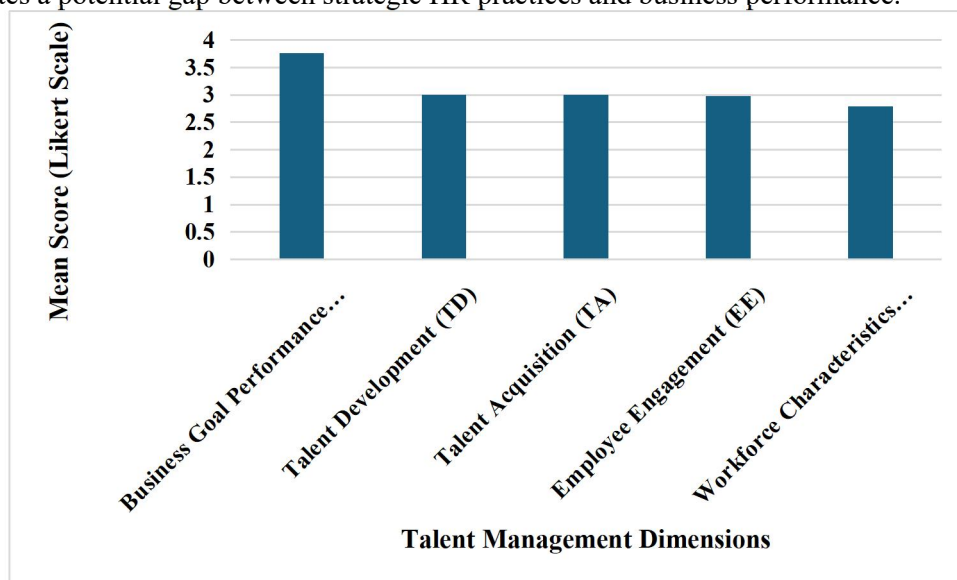


Figure 2. Comparative Analysis of Talent Management Dimensions

3.3 Relationship Between Talent Management and Business Performance

Table 3 shows the Pearson correlation between aspects of talent management and Business Goal Performance. The results indicate that workforce Characteristics have a significant positive correlation with Business Goal Performance ($r = 0.4964$), which means that workforce-related variables, including employee tenure, employee performance rating, and employee capability are significantly related to business outcomes. Conversely, Talent Acquisition, Talent Development and Employee Engagement demonstrate very weak relationships with Business Goal Performance. Business Goal Performance has a weak positive correlation

with Talent Development ($r = 0.0264$), and a very weak negative relationship with Talent Acquisition ($r = -0.0068$) and Employee Engagement ($r = -0.0129$). These findings indicate that workforce attributes are primarily associated with business performance in the dataset as opposed to the indicators of recruitment, development, or engagement.

Table 3. Correlation Matrix of Key Variables

Variable	TA	TD	EE	WC	BGP
Talent Acquisition (TA)	1.0000				
Talent Development (TD)	-0.0406	1.0000			
Employee Engagement (EE)	0.0137	0.0141	1.0000		
Workforce Characteristics (WC)	-0.0255	0.0309	-0.0063	1.0000	
Business Goal Performance (BGP)	-0.0068	0.0264	-0.0129	0.4964	1.0000

On the whole, the results on correlation show that only Workforce Characteristics are moderately positively related to Business Goal Performance, and other dimensions of talent management are not significantly related. This means that the organizational performance outcomes are deeply interrelated with the current practices of workforce quality than with independent practices of talent acquisition, development or engagement.

3.4 Regression Analysis

In order to test the relationship between Business Goal Performance and the Talent Acquisition, Talent Development, Employee Engagement and Workforce Characteristics, multiple regression analysis was carried out. The overall model is statistically significant ($F = 245.23$, $p < 0.001$) indicating that the set of predictors used in the overall model explains variation in business performance. The model yielded a value of R^2 of 0.2467 indicating that about 24.67% of the difference in Business Goal Performance is explained by the independent variables. The adjusted R^2 value (0.2457) is very close to the R^2 value indicating that the model is stable and is not overly sensitive to the number of predictors. Workforce Characteristics is the strongest predictor of Business Goal Performance, and the only statistically significant predictor of Business Goal Performance ($\beta = 0.4082$, $p = 0.001$). It implies that positive changes in the factors related to workforce are linked with positive performance of the business. However, Talent Acquisition ($\beta = 0.0044$, $p = 0.6822$), Talent Development ($\beta = 0.0088$, $p = 0.4691$), and Employee Engagement ($\beta = -0.0077$, $p = 0.5270$) are not statistically significant. Thus, the findings indicate that the workforce in terms of its characteristics, as opposed to recruitment, development, or engagement measures in the current data set, are primarily the determinants of business performance.

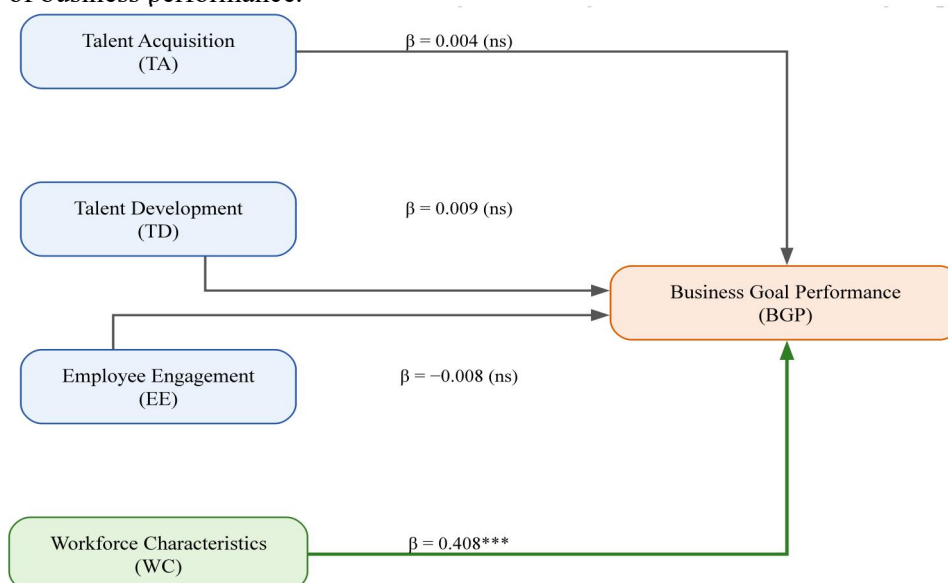


Figure 3. Regression Model Showing Impact on Business Goal Performance

Note: $***p < 0.001$; ns = not significant.

4. Discussion

The results of the current study suggest that the dimension of talent management has different levels of impact on the performance of the business goals. Although the descriptive and analytical findings indicate that the overall talent management practices are moderately practiced across all dimensions, their direct influence on the performance is not equally strong across all dimensions. Specifically, workforce characteristics were found to have the strongest direct relationships, with talent acquisition, development, and engagement having weaker direct relationships.

To some extent, these findings can be corroborated by the existing literature, which highlights the fact that organizational outcomes can be achieved through talent management practices, but the existing literature tends to emphasize that talent management practices are indirectly or mediately related to organizational outcomes. As an example, employee engagement has been determined to be a major mediating variable between talent management practices and performance outcomes (Abdullahi et al., 2022; Sinisterra et al., 2024). In a similar manner, the conceptualization of talent management as a multi-dimensional construct indicates that its effects may not necessarily be immediate but develop over time as part of the organizational processes (Mujtaba et al., 2022). The findings are also in line with the thesis that employee competencies and workforce quality is a significant factor in improving performance (Otoo, 2019). Thus, the paper points out that although there are talent management systems, their effectiveness would greatly depend on their ability to increase the working capacities of the workforce, as well as their alignment with performance results.

The study results highlight the necessity of organizations in aligning the human resource management systems more with business strategy. The low direct correlation between some of the practices of talent management and performance implies that HR practices might not be strategically aligned with organizational objectives. Such disconnectivity may constrain the efficiency of recruitment, training and engagement procedures in achieving business results.

According to the literature on strategic HRM, talent management needs to be integrated into organizational strategy to achieve sustainable performance gains (Sepahvand & Khodashahri, 2021). Organizations ought to aim at formulating integrated HR systems that will connect recruitment, development, performance management and retention with the strategic goals of the organization. The results also support the significance of employee retention and engagement as the key factors of organizational success (Urme, 2023; Dalal and Akdere, 2023). Moreover, recent studies emphasize the importance of organizational support and leadership in enhancing the effectiveness of talent management practices on the results of performance (Karim et al., 2025; Zada et al., 2024). Therefore, organizations need to go beyond silo-based HR practices and pursue comprehensive approach to talent management which can be used to support long term business objectives. Using secondary HR datasets and applying quantitative analytical methods, the study presents how data-driven methods can be used to understand the talent management systems and their effects on organizational performance.

The need to integrate HR analytics into talent management research is getting more and more recognized as crucial in enhancing organizational performance and decision-making processes (McCartney and Fu, 2022). Furthermore, with the adoption of HR analytics and digital tools, organizations will be able to better analyze data on workforce and align HR strategies with business objectives (Fernandez and Gallardo-Gallardo, 2021; Margherita, 2022). The paper is also relevant to the increasing amount of literature and research on the topic of HR analytics as a sustainable management and performance improvement tool (Álvarez-Gutiérrez et al., 2022; Huang et al., 2023). Thus, the research has an interdisciplinary value as it connects the HRM practices with the business analytics and evidence-based decision-making.

The research results have a number of practical implications on organizations that aim to enhance their talent management systems. To begin with, organizations ought to improve on the recruitment strategies; in this case, organizations should concentrate on recruiting candidates whose skill and competency levels are aligned with long-term business objectives. Enhancing the recruitment process can be used to establish a sound workforce base that can be used as a supporting force to organizational performance. Second, the organizations ought to do more in terms of training and development programs to enhance the ability and flexibility of the employees. Even though training programs do exist, the outcome indicates that they have weak effects on performance, which means that the training programs need to be more structured and continuous development programs. With proper talent development practices, the competencies of employees and organizational performance can be significantly enhanced (Goyal et al., 2023). Third, organizations need to focus on employee engagement by ensuring an enabling working environment, work-life balance, and acknowledging worker input. Engagement is a key factor that can impact retention,

motivation, and performance (Sinisterra et al., 2024). Moreover, organizations are encouraged to consider a strategic approach to talent management incorporating a combination of HR practices and business goals, as well as by using HR analytics to make data-driven decisions.

On the whole, the analysis indicates that companies need to take a more strategic and integrated approach to talent management, involving alignment of HR practices with business needs, in order to realize long-term and sustainable performance enhancements.

5. Conclusion

This paper concludes that strategic talent management systems are important factors that can influence the attainment of business goals, but the effectiveness of these systems is subject to their alignment with the need of the business. The empirical results suggest that although there are practices of talent acquisition, development, and engagement in the organization, their direct relationship with performance outcomes is somewhat weak. Rather, workforce traits, specifically experience and level of performance in the employees are the most impactful forces that drive business success. This implies that organizations are currently utilizing more of the current capabilities of the employees rather than maximizing on the organized talent management systems in order to maximize performance. The notable contribution of this work is that it reveals how HR analytics could be used to enhance the use of data in decision-making. Through the use of secondary data and statistical analysis, the study demonstrates the significance of the use of evidence-based HR practices. HR analytics can help organizations to find patterns, understand the success of talent management programs, and make a wise decision that will make working resources more productive and achieve better organizational performance. This transition to the use of analytics-based HRM is imperative to organizations that are in business environments that are dynamic and competitive. The results further highlight the necessity of further integration between the talent management systems and organizational strategy. Firms need to turn the scattered HR practices into holistic practices which will align recruitment, training, engagement and workforce planning to the business goals. This alignment can be strengthened to make talent management systems more effective and to make sure that HR initiatives can make a difference in long-term performance. To sum up, organizations can become sustainable in their business success by investing in strategic talent management systems, leveraging HR analytics to make informed decisions and ensure that human resource practices are closely aligned with organizational goals and performance strategies.

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